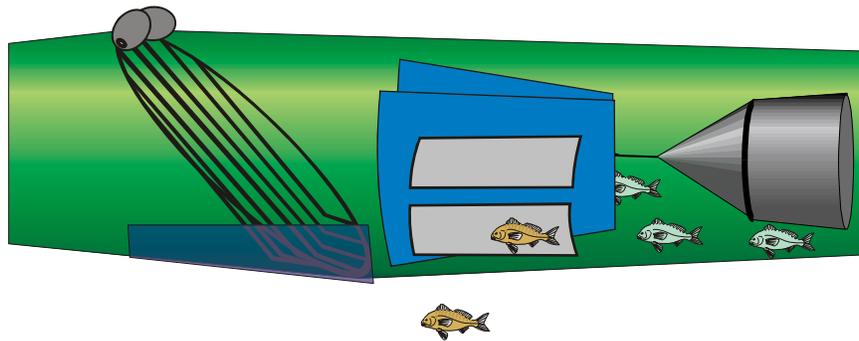


# Recommended Construction and Installation Instructions for the Modified Jones-Davis Bycatch Reduction Device

NOAA Fisheries Service, Mississippi Laboratories  
P.O. Drawer 1207, Pascagoula, Ms 39568-1207  
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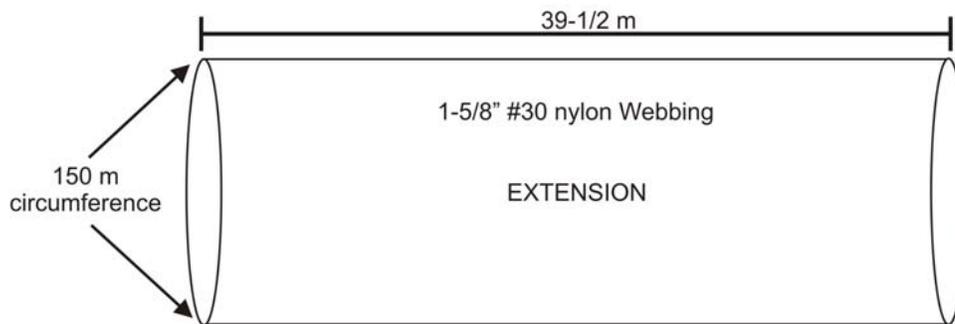
The Modified Jones Davis BRD consists of two panels of webbing sewn diagonally across the trawl extension immediately behind the TED to form a funnel of small mesh webbing. The panels make a channel for shrimp to pass into the codend while creating an area of reduced water flow to allow for fish escapement through four openings (two on each side) cut into the trawl extension. A webbing cone is installed into the trawl extension behind the funnel in order to stimulate fish escapement.

## Minimum Construction and Installation Requirements

### **Construction of the webbing extension**

The webbing extension must be constructed from a single piece of 1-5/8 inch (41 mm) stretch mesh number 30 nylon 39-1/2 meshes by 150 meshes. A tube is formed with the extension webbing by sewing the 39-1/2 mesh sides together (figure 1).

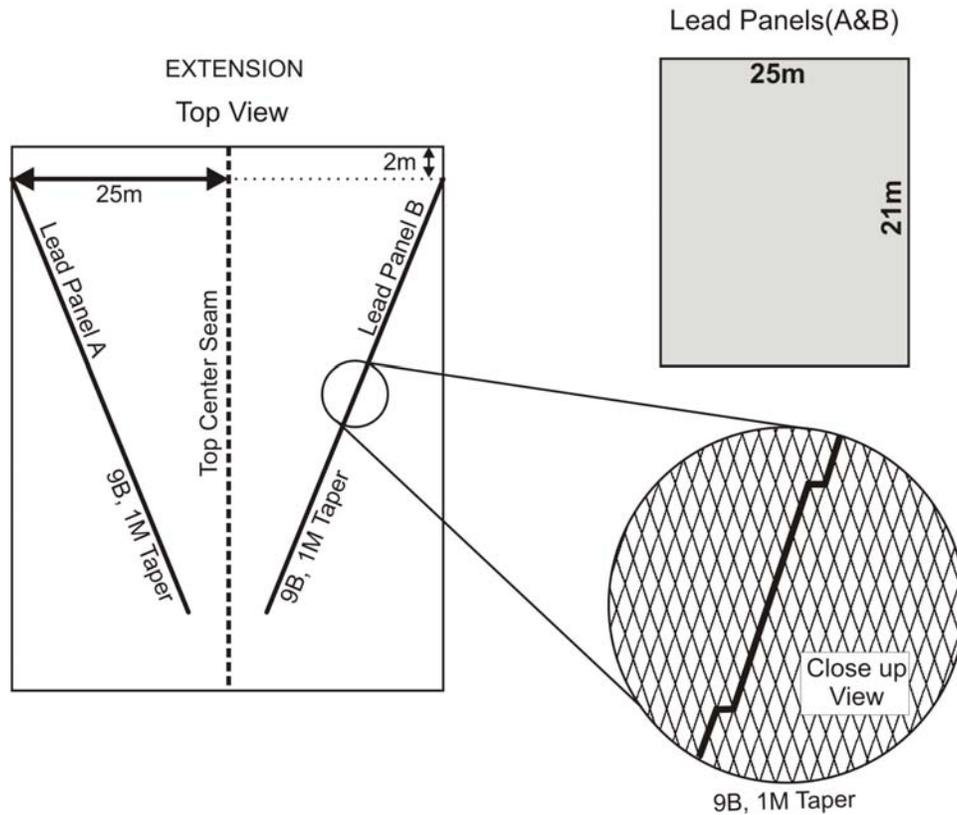
**Figure 1.**



### **Construction of the funnel**

The funnel must be constructed from lead panels consisting of two sections of 1-5/8 inch (41 mm) heat-set and depth-stretched polypropylene or polyethylene webbing (figure 2). The two side sections must be rectangular in shape, 25 meshes on the leading edge by 21 meshes deep (A&B). The 25 mesh leading edge of each polyethylene webbing sections must be sewn evenly two meshes back from the leading edge of the webbing extension starting 25 meshes from the top center on each side. The 21 mesh edge must be sewn to the extension webbing on a 9 bar and 1 mesh angle in the top and bottom forming a V shaped funnel.

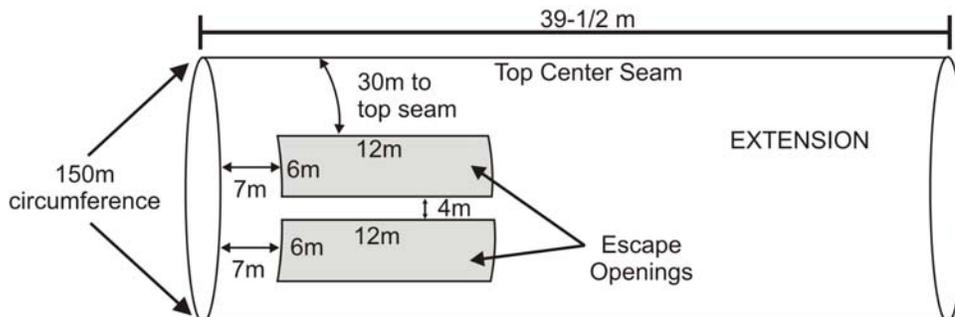
**Figure 2. Construction of the Funnel**



**Cutting the escape openings**

Two escape openings 6 meshes wide by 12 meshes deep must be cut 4 meshes apart in the extension webbing, starting at the top center extension seam, 7 meshes back from the leading edge and 30 meshes to the left and to the right (total of four openings) (figure 3). The four escape openings must be double selvaged for strength.

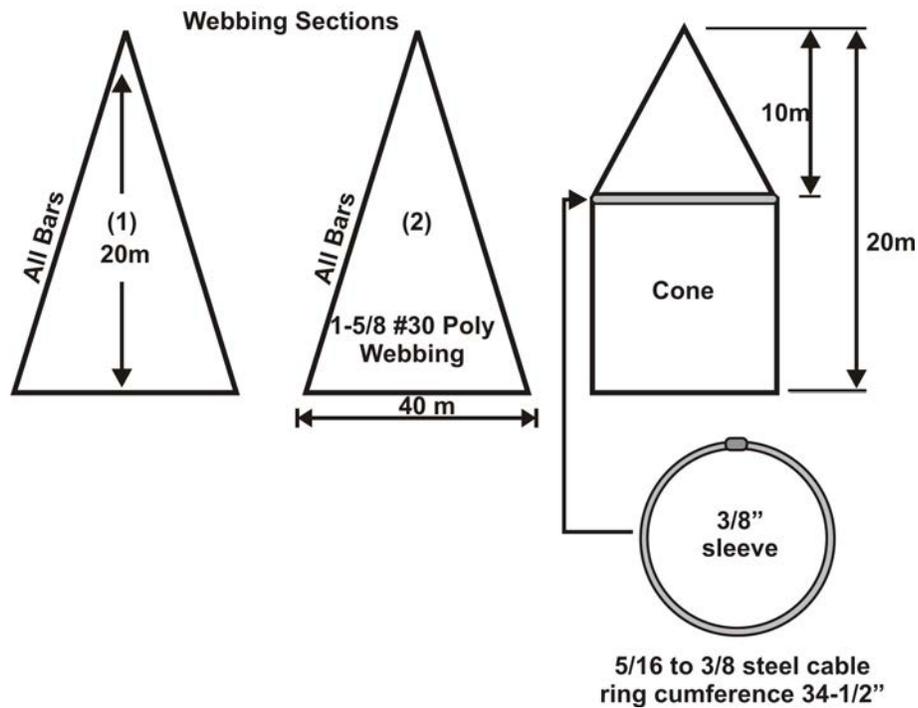
**Figure 3. Escape Openings**



## Construction of the cone fish deflector

The cone fish deflector is constructed of 2 pieces of 1-5/8 inch (41 mm) polypropylene or polyethylene webbing, 40 meshes wide by 20 meshes in length and cut on the bar on each side forming a triangle (figure 4). Starting at the apex of the two triangles, the two pieces must be sewn together to form a cone of webbing. A single hoop must be constructed of 5/16 inch (8 mm) or 3/8 inch (9.5 mm) cable 34-1/2 inches (88 cm) in length. The ends must be joined by a 3 inch piece of 3/8 inch (9.5 mm) aluminum pipe pressed together with a 1/4 inch (6.4 mm) die. The hoop must be inserted in the webbing cone, attached 10 meshes from the apex and laced all the way around with heavy twine.

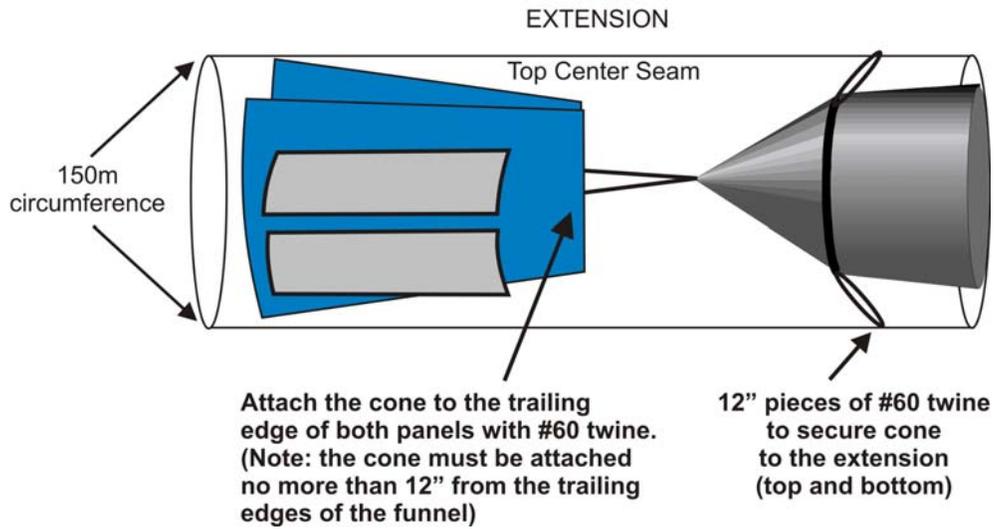
Figure 4. Construction of the cone fish deflector



## Installation of the cone in the extension

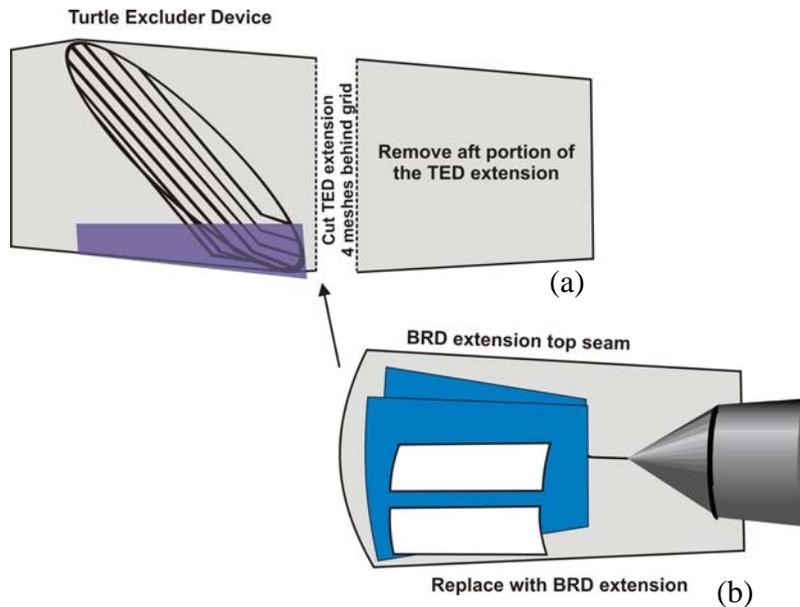
The apex of the cone must be installed in the extension within 12 inches behind the back edge of the funnel and attached in four places (figure 5). The midpoint of a piece of number 60 twine (or at least 4 mesh wide strip of #21 or heavier webbing), 3 ft in length must be attached to the apex of the cone. This piece of twine or webbing must be attached within 5 meshes of the aft edge of the funnel at the center of each of its sides. Two 12 inch (30.5 cm) pieces of number 60 (or heavier) twine must be attached to the top and bottom of the cable ring of the cone. The opposite ends of these two pieces of twine must be attached to the top and bottom center of the extension webbing to keep the cone from inverting into the funnel.

**Figure 5. Installation of the cone**



## Installation of the Modified Jones Davis BRD

The Modified Jones Davis BRD is designed to be installed immediately behind the Turtle Excluder Device (TED). To install the BRD, first remove the rear portion of the TED extension by cutting the TED extension on an even row of meshes four (4) meshes behind the posterior edge of the TED grid (a). Next, join the leading edge of the BRD extension evenly to the TED extension directly behind the TED (b). When attached, the BRD extension should be oriented so that the BRD extension seam is located on top of the trawl when towing. Complete the installation by attaching the codend (bag) to the trailing edge of the BRD extension.



**This document was prepared for general informational purposes in March 2008 and has no legal force or effect. Please refer to the federal BRD regulations, 50 CFR part 622 and 622 Appendix D and the Federal Register for specific and controlling BRD requirements.**

For more information contact:  
NOAA Fisheries  
Harvesting Systems and Engineering Branch  
P.O. Drawer 1207  
Pascagoula, MS 39568  
(228) 762-4591  
[Robert.D.Stevens@noaa.gov](mailto:Robert.D.Stevens@noaa.gov) or  
[Daniel.G.Foster@noaa.gov](mailto:Daniel.G.Foster@noaa.gov)